

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

BRITISH TELECOMMUNICATIONS
PLC,

Plaintiff,

v.

COXCOM, INC.; AND COX
COMMUNICATIONS, INC.,

Defendants.

Civ. No. 10-658-SLR

COMCAST CABLE
COMMUNICATIONS; AND
COMCAST CORPORATION,

Plaintiffs,

v.

BRITISH TELECOMMUNICATIONS
PLC,

Defendant.

Civ. No. 11-843-SLR

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MEMORANDUM OPINION

Dated: January 13, 2014
Wilmington, Delaware


ROBINSON, District Judge

I. INTRODUCTION

On August 5, 2010, British Telecommunications plc (“BT”) filed a complaint against Coxcom, Inc. (“Coxcom”), Cox Communications, Inc. (“Cox Communications”) (collectively, “Cox”), and Cable One, Inc. (“Cable One”),¹ alleging infringement of U.S. Patent Nos. 5,142,532 (“the ‘532 patent”), 5,526,350 (“the ‘350 patent”), 6,538,989 (“the ‘989 patent”), and 6,665,264 (“the ‘264 patent”).² (D.I. 1) On September 6, 2011, BT amended its complaint against Cox and Cable One, expanding the infringement allegations to include U.S. Patent Nos. 5,790,643 (“the ‘643 patent”), 5,923,247 (“the ‘247 patent”), 6,205,216 (“the ‘216 patent”), and 6,473,742 (“the ‘742 patent”).³ (D.I. 66) Two weeks later, Comcast Cable Communications (“Comcast Cable”) and Comcast Corporation (collectively, “Comcast”) filed a complaint alleging invalidity and non-infringement of those same eight patents.⁴ (Civ. No. 11-843, D.I. 1)

BT is a corporation organized and existing under the laws of the United Kingdom, having a principal place of business in London, England. (D.I. 1 at ¶ 1) Coxcom is a Delaware corporation with a principal place of business in Atlanta, Georgia. (*Id.* at ¶ 2) Cox Communications is a Delaware corporation with a principal place of business in Atlanta, Georgia. (*Id.* at ¶ 3) Comcast Cable is a limited liability

¹Cable One has been dismissed by stipulation. (D.I. 239 as ordered by the court)

²All citations are to Civ. No. 10-658, unless otherwise indicated.

³The ‘643 patent is no longer at issue. (D.I. 282 as ordered by the court)

⁴The court later denied BT’s motion to add Comcast to the Cox case. (Oral Order by Judge Sue L. Robinson on March 12, 2012) The ‘216 and ‘264 patents will be addressed separately. (Civ. No. 11-843, D.I. 155)

company organized and existing under the laws of the State of Delaware, with a principal place of business in Philadelphia, Pennsylvania. (Civ. No. 11-843, D.I. 1 at ¶ 1) Comcast Corporation is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, with a principal place of business in Philadelphia, Pennsylvania. (*Id.* at ¶ 2)

Presently before the court are several motions: BT's motion to exclude the declaration of Jeffrey Finkelstein (D.I. 379); Cox's motion to strike portions of the declarations of Dr. Almeroth, Dr. Lyon, and Mr. Griffin (D.I. 402); BT's motion to exclude the testimony of Regis Bates (D.I. 310); Cox's motion to exclude the testimony of BT's infringement experts (D.I. 311); Cox's motion for summary judgment of non-infringement of all asserted claims (D.I. 345); and competing motions regarding the validity of the patents-in-suit (D.I. 320; D.I. 351). The court has jurisdiction over this matter pursuant to 28 U.S.C. §§ 1331 and 1338(a).

II. STANDARDS OF REVIEW

A. Summary Judgment

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The moving party bears the burden of demonstrating the absence of a genuine issue of material fact. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 415 U.S. 574, 586 n.10 (1986). A party asserting that a fact cannot be—or, alternatively, is—genuinely disputed must support the assertion either by citing to "particular parts of materials in the record, including depositions, documents,

electronically stored information, affidavits or declarations, stipulations (including those made for the purposes of the motions only), admissions, interrogatory answers, or other materials,” or by “showing that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact.” Fed. R. Civ. P. 56(c)(1)(A) & (B). If the moving party has carried its burden, the nonmovant must then “come forward with specific facts showing that there is a genuine issue for trial.” *Matsushita*, 415 U.S. at 587 (internal quotation marks omitted). The court will “draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence.” *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000).

To defeat a motion for summary judgment, the non-moving party must “do more than simply show that there is some metaphysical doubt as to the material facts.” *Matsushita*, 415 U.S. at 586-87; *see also Podohnik v. U.S. Postal Service*, 409 F.3d 584, 594 (3d Cir. 2005) (stating party opposing summary judgment “must present more than just bare assertions, conclusory allegations or suspicions to show the existence of a genuine issue”) (internal quotation marks omitted). Although the “mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment,” a factual dispute is genuine where “the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Anderson v. Liberty Lobby, Inc.*, 411 U.S. 242, 247-48 (1986). “If the evidence is merely colorable, or is not significantly probative, summary judgment may be granted.” *Id.* at 249-50 (internal citations omitted); *see also Celotex Corp. v. Catrett*, 411 U.S. 317, 322 (1986) (stating entry of summary judgment is mandated “against a party who

fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial").

B. Claim Construction

Claim construction is a matter of law. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1330 (Fed. Cir. 2005) (en banc). Claim construction focuses on intrinsic evidence - the claims, specification and prosecution history - because intrinsic evidence is "the most significant source of the legally operative meaning of disputed claim language." *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996); *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). Claims must be interpreted from the perspective of one of ordinary skill in the relevant art at the time of the invention. *Phillips*, 415 F.3d at 1313.

Claim construction starts with the claims, *id.* at 1312, and remains centered on the words of the claims throughout. *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001). In the absence of an express intent to impart different meaning to claim terms, the terms are presumed to have their ordinary meaning. *Id.* Claims, however, must be read in view of the specification and prosecution history. Indeed, the specification is often "the single best guide to the meaning of a disputed term." *Phillips*, 415 F.3d at 1315.

"In construing a means-plus-function claim, the district court must first determine the claimed function and then identify the corresponding structure in the written description of the patent that performs that function." *Baran v. Med. Device Techs., Inc.*, 616 F.3d 1309, 1316 (Fed. Cir. 2010) (citing *Applied Med. Res. Corp. v. U.S.*

Surgical Corp., 448 F.3d 1324, 1332 (Fed. Cir. 2006)).

C. Infringement

A patent is infringed when a person “without authority makes, uses or sells any patented invention, within the United States . . . during the term of the patent.” 35 U.S.C. § 271(a). A two-step analysis is employed in making an infringement determination. See *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995). First, the court must construe the asserted claims to ascertain their meaning and scope. See *id.* Construction of the claims is a question of law subject to de novo review. See *Cybor Corp. v. FAS Techs.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998). The trier of fact must then compare the properly construed claims with the accused infringing product. See *Markman*, 52 F.3d at 976. This second step is a question of fact. See *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998).

“Direct infringement requires a party to perform each and every step or element of a claimed method or product.” *BMC Res., Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1378 (Fed. Cir. 2007), *overruled on other grounds by* 692 F.3d 1301 (Fed. Cir. 2012). “If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law.” *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000). If an accused product does not infringe an independent claim, it also does not infringe any claim depending thereon. See *Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1546, 1553 (Fed. Cir. 1989). However, “[o]ne may infringe an independent claim and not infringe a claim dependent on that claim.” *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007) (quoting *Wahpeton*

Canvas, 870 F.2d at 1552) (internal quotations omitted). A product that does not literally infringe a patent claim may still infringe under the doctrine of equivalents if the differences between an individual limitation of the claimed invention and an element of the accused product are insubstantial. See *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 24 (1997). The patent owner has the burden of proving infringement and must meet its burden by a preponderance of the evidence. See *SmithKline Diagnostics, Inc. v. Helena Lab. Corp.*, 859 F.2d 878, 889 (Fed. Cir. 1988) (citations omitted).

When an accused infringer moves for summary judgment of non-infringement, such relief may be granted only if one or more limitations of the claim in question does not read on an element of the accused product, either literally or under the doctrine of equivalents. See *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1376 (Fed. Cir. 2005); see also *TechSearch, L.L.C. v. Intel Corp.*, 286 F.3d 1360, 1369 (Fed. Cir. 2002) (“Summary judgment of noninfringement is ... appropriate where the patent owner’s proof is deficient in meeting an essential part of the legal standard for infringement, because such failure will render all other facts immaterial.”). Thus, summary judgment of non-infringement can only be granted if, after viewing the facts in the light most favorable to the non-movant, there is no genuine issue as to whether the accused product is covered by the claims (as construed by the court). See *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1304 (Fed. Cir. 1999).

D. Invalidity

1. Indefiniteness

The definiteness requirement is rooted in § 112, ¶ 2, which provides that “the specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” “A determination of claim indefiniteness is a legal conclusion that is drawn from the court’s performance of its duty as the construer of patent claims.” *Personalized Media Comm., LLC v. Int’l Trade Com’n*, 161 F.3d 696, 705 (Fed. Cir. 1998).

Determining whether a claim is definite requires an analysis of whether one skilled in the art would understand the bounds of the claim when read in light of the specification . . . If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, § 112 demands no more.

Id. (citing *Miles Lab., Inc. v. Shandon, Inc.*, 997 F.2d 870, 875 (Fed. Cir. 1993)).

Under 35 U.S.C. § 112 ¶ 6, “[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure ... in support thereof, and such claim shall be construed to cover the corresponding structure ... described in the specification and equivalents thereof.” This allows “the use of means expressions in patent claims without requiring the patentee to recite in the claims all possible structures that could be used as means in the claimed apparatus.” *Medical Instrumentation and Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1211 (Fed. Cir. 2003) (citing *O.I. Corp. v. Tekmar Co.*, 115 F.3d 1576, 1583 (Fed. Cir. 1997)). The quid pro quo is the “duty [of the patentee] to clearly link or associate structure to the claimed function.” *Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1377 (Fed. Cir. 2001) (citations omitted). “The price that must be paid for use of that convenience is limitation of the claim to the means specified in the written description

and equivalents thereof.” *O.I. Corp.*, 115 F.3d at 1583.

Whether the written description adequately sets forth the structure corresponding to the claimed function must be considered from the perspective of a person skilled in the art. *Telcordia Techs., Inc. v. Cisco Sys.*, 612 F.3d 1365, 1376 (Fed. Cir. 2010) (citing *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1365–66 (Fed. Cir. 2003)). “The question is not whether one of skill in the art would be capable of implementing a structure to perform the function, but whether that person would understand the written description itself to disclose such a structure.” *Id.* (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1338 (Fed. Cir. 2008)). Ultimately, if no corresponding structure is disclosed in the specification, the claim term must be construed as indefinite. See *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007) (“If there is no structure in the specification corresponding to the means-plus-function limitation in the claims, the claim will be found invalid as indefinite.”).

2. Anticipation

Under 35 U.S.C. § 102(a), “a person shall be entitled to a patent unless the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the application for patent.”

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

A single prior art reference may expressly anticipate a claim where the reference explicitly discloses each and every claim limitation. However, the prior art need not be *ipsisssimis verbis* (i.e., use identical words as those recited in the claims) to be expressly anticipating. *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716 (Fed. Cir. 1984).

A single prior art reference also may anticipate a claim where one of ordinary skill in the art would have understood each and every claim limitation to have been disclosed inherently in the reference. *Continental Can Co. USA Inc. v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991). The Federal Circuit has explained that an inherent limitation is one that is necessarily present and not one that may be established by probabilities or possibilities. *Id.* That is, “the mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Id.* The Federal Circuit also has observed that “inherency operates to anticipate entire inventions as well as single limitations within an invention.” *Schering Corp. v. Geneva Pharms. Inc.*, 339 F.3d 1373, 1380 (Fed. Cir. 2003). Moreover, recognition of an inherent limitation by a person of ordinary skill in the art before the critical date is not required to establish inherent anticipation. *Id.* at 1377.

An anticipation inquiry involves two steps. First, the court must construe the claims of the patent in suit as a matter of law. *Key Pharms. v. Hercon Lab. Corp.*, 161 F.3d 709, 714 (Fed. Cir. 1998). Second, the finder of fact must compare the construed claims against the prior art to determine whether the prior art discloses the claimed invention. *Id.*

Even if the prior art discloses each and every limitation of set forth in a claim, such disclosure will not suffice under 25 U.S.C. § 102 if it is not enabling. *In re Borst*, 345 F.2d 851, 855 (C.C.P.A. 1965). “Long ago our predecessor court recognized that a non-enabled disclosure cannot be anticipatory (because it is not truly prior art) if that disclosure fails to ‘enable one of skill in the art to reduce the disclosed invention to practice.’” *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1354 (Fed. Cir. 2003)(citations omitted). The patentee bears the burden to show that the prior art reference is not enabled and, therefore, disqualified as relevant prior art for an anticipation inquiry. *Id.* at 1355.

III. EXCLUDING EXPERT DECLARATIONS

Before reaching the parties’ substantive issues on summary judgment, the court must discern what the record is. The parties’ respective experts submitted multiple reports. BT submitted Dr. Lyon’s opening expert report regarding Cox’s infringement of the ‘532 and ‘989 patents, on March 8, 2013. (D.I. 313, ex. 4) On March 11, 2013, BT submitted Dr. Almeroth’s opening expert report regarding Cox’s infringement of the ‘350 and ‘247 patents, and Mr. Griffin’s opening expert report regarding Cox’s infringement of the ‘742 patent. (D.I. 313, ex. 1, 3) On May 2 and 17, 2013, Cox’s expert, Mr. Wechselberger, submitted reports regarding non-infringement and invalidity. (D.I. 300, ex. 21,23) On May 17, 2013, Dr. Lyon, Dr. Almeroth, and Dr. Griffin submitted reply reports. (D.I. 402 at 2) On April 25, 2013, Cox’s expert, Dr. Evans, submitted a rebuttal expert report. (D.I. 348, ex. 2)

BT now moves to exclude the declaration of Jeffrey Finkelstein, filed

contemporaneously with Cox's motion for non-infringement. (D.I. 379) Cox argues that Mr. Finkelstein's opinions are factual and based on his knowledge of the Cox network through his employment at Cox and supported by evidence. (D.I. 434 at 3) Mr. Finkelstein is a Cox employee, responsible for Network Architecture and Design, who testified as a corporate fact witness in this case. (D.I. 348, ex. 1 at ¶¶ 1-3) Mr. Finkelstein's declaration is devoid of references to evidence or to expert reports. As Cox did not identify Mr. Finkelstein as an expert witness, nor were his opinions vetted through discovery, the court grants BT's motion to exclude.

Cox moves to strike portions of the declarations of Dr. Almeroth (D.I. 391), Dr. Lyon (D.I. 392), Mr. Griffin (D.I. 393)⁵ submitted by BT in support of its briefing on non-infringement. (D.I. 390) BT argues that the opinions expressed in the declarations are supported by previously disclosed evidence and the expert reports. (D.I. 441, ex.1) If this were so, BT should have referenced those documents. The court grants Cox's motion to strike.

IV. DISCUSSION

For each of the five patents-in-suit, the court will discuss the background technology, any necessary claim construction on summary judgment, and any infringement and invalidity issues on summary judgment.⁶

A. The '742 Patent

⁵And the respective appendices totaling approximately 800 pages. (D.I. 394; D.I. 395; D.I. 396)

⁶The court will not substantively address the non-infringement arguments to the extent that the parties relied on opinions from the excluded declarations. When possible, the court considered concurrent citations to evaluate the parties' arguments.

The '742 patent, "Reception Apparatus for Authenticated Access to Coded Broadcast Signals," issued October 29, 2002. (D.I. 66, ex. H) The '742 patent describes controlling a user's access to permitted transmissions. The specification describes comparing incoming station identifiers to a "list of permitted and/or prohibited services." (3:2-12). The parties explain that, in the context of cable television, the CableCARD is a device which controls which services or channels a customer may receive. If the CableCARD allows receipt of a channel, it then decrypts the encrypted transmissions associated with the service and routes those transmissions to the host (or set-top box) for display. If a particular service contains high value content, the CableCARD encrypts the data a second time before sending it to the host. The host receives the data and encryption key and decrypts the programs in order to display them. (D.I. 292 at 34-35; D.I. 277 at 9-11). Independent claim 1 recites:

Apparatus for receiving broadcast transmissions, which transmissions contain identifiers identifying the origin of the transmission, the apparatus including:

- a store for storing data identifying transmissions which the apparatus is or is not permitted to receive;
- means for loading the store with such data; and
- means for comparing received identifiers with the contents of the store and to enable or disable reception in dependence on the result of the comparison;
- wherein the apparatus has a fixed part and a removable part;
- wherein the removable part contains a further store containing the said data;
- the loading means being operable to transfer the contents of the further store into the first-mentioned store; and
- wherein each of the fixed and removable parts has means storing a verification number (X) and the loading means is operable to perform the transfer only after a verification step indicating that the verification numbers tally.

(6:53-7:5)

1. Claim Limitations

a. “[M]eans for loading the store with such data”

The court construes the function of this limitation as “loading the store with such data,” where the “such data” is “the data identifying permitted and/or forbidden services.” The structure is construed as “using the module’s programmed microprocessor, in response to a request from the host, to transfer such data from the module to the host via their respective input-output ports, and using the host’s microprocessor to store such data in the host’s read-write memory.” This construction finds support in the specification, which references a “service selection list” consisting of “permitted and/or forbidden services.” (2:13-23; 5:20-32)

b. “[T]o enable or disable reception [of transmissions] in dependence on the result of the comparison”

Consistently with the previous limitation and the specification, the court construes this limitation as “turning on or off the receipt of broadcast transmissions based on the data identifying permitted and/or forbidden services.” (3:7-12, 3:20-21)

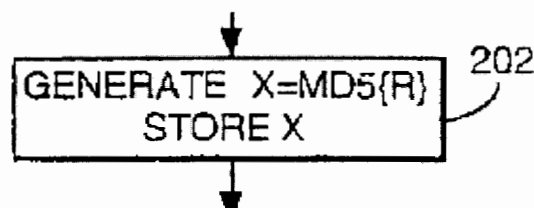
c. “[M]eans for comparing received identifiers with the contents of the store and to enable or disable reception in dependence on the result of the comparison”

The court construes the function of this limitation as “comparing received identifiers with the contents of the store and to enable or disable reception in dependence on the result of the comparison.” The structure is construed as “a

microprocessor programmed to compare station identifiers extracted by an extractor circuit with data identifying permitted and/or forbidden services stored in the fixed part's RAM, and to enable or disable reception based on that comparison via the algorithms set forth in column 5, lines 33-43 and 53-65, as well as Figure 5.”⁷ *WMS Gaming v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999) (“In a means-plus-function claim in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm.”).

d. “[Wherein each of the fixed and removable parts has] means storing a verification number”

The specification describes the fixed portion as having “a microprocessor 11 . . . connected also to a volatile read-write memory 13 which provides working (“scratchpad”) storage 13a as well as locations 13b for containing a list of station identifiers corresponding to permitted and/or forbidden services” (2:13-19) The host generates a random number R, computes the verification number X, encrypts X and sends it to the module. (4:30-41) Figure 4 describes the computation step in a block as:



⁷Contrary to BT's argument, figure 2 and the corresponding text disclose that the microprocessor makes the comparison, but do not disclose a simple algorithm for how the comparison is made. (Fig. 2; 3:7-10)

The block diagram, along with the description of the working memory, provide the means to store the result of the computation, X, in the portion of the read-write memory 13a. The court concludes that the limitation is not indefinite. The court construes the limitation as having the function “storing a verification number” and the structure “a microprocessor connected to a memory.”

2. Infringement

The CableCARD provides the “conditional access” functionality of the system. (D.I. 348 at § 4.1, Open Cable Specifications (“The OCHD2.1 SHALL utilize the Card to perform the following Conditional Access functions as defined in [CableCARD Copy Protection 2.0 Specification]: CA descrambling, authorization, entitlement, and Copy Protection encryption.”)); see e.g., *Comcast Corp. v. F.C.C.*, 526 F.3d 763, 765 (D.C. Cir. 2008) (“Video providers have complied with the Commission’s rules by introducing the ‘CableCARD,’ which is a credit card-sized device that contains the video provider’s security information. When this card is plugged into a set-top box, it enables the customer to access the video programming and services to which he has subscribed.) (citations omitted).

The parties agree that the claim requires that the set-top box make a decision on whether or not it can receive and display a program. (D.I. 390 at 3-4) However, the parties dispute whether certain “copy protection” functions performed by the set-top box satisfy the claim limitations. As described by BT’s expert, high value content programs are encrypted a second time by the CableCARD and sent to the set-top box, which then decrypts the programs in order to display them. (D.I. 396, exs. 21 at ¶¶ 38, 67-70, 24 at

12-25) The set-top box compares the encrypted programs to stored copy control information “to apply [h]ost decryption to programs that have been authorized under the copy protection scheme,” and decrypt and enable reception of the” encrypted programs. (*Id.* at ¶¶ 38, 98)

The claim language and specification do not equate encryption with reception. As construed, the comparing limitation requires comparison of transmission identifiers with a list of the data identifying permitted and/or forbidden services to determine whether the apparatus is permitted to receive the transmissions. Further, this claim limitation requires that the set-top box “enable or disable reception,” depending on the result of the comparison. The second level of copy protection, i.e., encryption, is a separate function from the “conditional access” contemplated by the claim. Cox’s expert explains that the CableCARD first performs the comparison limitation to determine the authorized transmissions, and then adds an additional level of encryption to the high value programs as necessary. (D.I. 348, ex. 3 at 64-65) The court agrees with Cox that the second level of encryption and resulting decryption, which occurs after the conditional access comparison performed by the CableCARD, does not meet the requirements of the claim limitation. The decryption of the high value programs by the set-top box does not compare transmission identifiers with a list of permitted and/or forbidden services or “enable or disable reception” and, therefore, Cox’s motion for summary judgment of non-infringement is granted.⁸

⁸As the independent claims 1 and 9 are not infringed, neither are the asserted dependent claims. See *Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1546, 1553 (Fed. Cir. 1989) (If an accused product does not infringe an independent claim, it also does not infringe any claim depending thereon.).

3. Invalidity

BT argues that U.S. Patent No. 5,509,073 (“the ‘073 patent”) does not anticipate the ‘742 patent.⁹ (D.I. 359, ex. 28) As construed, the “means for loading the store with such data” limitation of the ‘742 patent requires a microprocessor. BT argues that the ‘073 patent does not disclose a microprocessor in the removable module, citing to a single line of testimony from Cox’s expert that “[m]emory cards typically don’t have a processor.”¹⁰ (D.I. 356 at 48, D.I. 359, ex. 29 at 419:19-23) BT also argues that the ‘073 patent does not disclose the last limitation of claim 1, i.e., that the fixed part and removable part each store a verification number X, and that the verifications numbers tally. BT avers that the specification and claim language require “that the fixed and removable parts each store the same verification number X.” (D.I. 354 at 48) The ‘073 patent discloses a memory card that stores “information (data) about the prepaid period of use (e.g. special dates or duration of time).” (‘073 patent, 2:25-26). Citing to Cox’s expert report, BT argues:

Even assuming arguendo that [defendants] are correct that the receiver of Monnin can perform a date checking of the information stored on the memory card, which “would

⁹Cox and Comcast did not move for summary judgment of invalidity of this patent.

¹⁰Cox replies that the ‘073 patent “explicitly discloses two removable modules—memory cards and smart cards . . . [and that], in the mid-1990s, many of these cards were understood to have built-in microprocessors.” (D.I. 382 at 36) “There are certain smart cards that were memory cards, and there were other smart cards that were considered more functional, did more than just store information. And those cards would typically have a processor in those.” (D.I. 386, ex. A45 at 252:3–6, BT’s expert, Mr. Griffin) “Q. Were there memory cards used in Eurocrypt, in particular, memory cards without processors? A. They certainly weren’t precluded” (D.I. 386, ex. A46 at 420:17–23, Cox’s expert, Mr. Wechselberger)

necessarily require that the current date be stored in a memory register before any such comparison could be made,” the receiver still does not store the same “information (data) about the prepaid period of use” (“verification number (X)”) as stored by the memory card.¹¹

(D.I. 354 at 49 (citing D.I. 359, ex. 30 at 13) BT does not point to evidence or expert reports to contradict the opinions and evidence offered by Cox’s experts, instead, BT presents conclusory attorney argument. BT, the movant, has not met its burden of persuasion, and its motion is denied.

B. The ‘989 Patent

The ‘989 patent, “Packet Network,” issued March 25, 2003. (D.I. 66, ex. C) The ‘989 patent describes a network with two classes of service: one called “bounded delay,” which transmission will not experience delay greater than a predefined amount, and the other called “best effort,” which does not have a specified maximum delay. (‘989 abstract; 5:1-12) Independent claim 13 is directed to a “network element,” which receives a flow of packets:

A method of controlling flow based packets in a packet network element comprising:
receiving flow based packets;
wherein a received packet is associable with a first or second class of service;
directing each received packet on the basis of its associated class to a first or a second corresponding packet buffer,
said first packet buffer being allocated a predetermined portion of a predetermined output bandwidth;
said second packet buffer being allocated the

¹¹Cox replies in part that its expert, “Mr. Wechselberger has repeatedly explained, the word “tally” requires only that “successful verification is conditioned upon some undefined agreement or arrangement between the verification number(s).” (D.I. 382 at 39-40; D.I. 386, ex. A47 at ¶ 132)

- remaining portion of the output bandwidth; and
- directing packets from the first and second packet buffers to an output;
- selectively for said first class flows:
 - determining bandwidth requirements associated with said first class flows; and
 - admitting said first class flow packets to the first packet buffer if said associated bandwidth requirement can be met.

Independent claim 18 relates to a “host element,” which generates the flows of packets and assigns a class of service to each flow:

- A method of generating packet based flows comprising:
 - generating packet based flows and associating each flow with a respective selected associated first or second class of service;
 - sending packets of first class flows to a first packet buffer, having a first packet buffer size, arranged to receive packets associated with the first class of service;
 - controlling the first packet buffer size;
 - sending packets of second class flows to a second packet buffer arranged to receive packets associated with the second class of service; and
 - directing packets from the first and second packet buffers to an output arranged to ensure that the first class packet flow rate does not exceed a selected peak rate bandwidth.

1. Claim Limitations

a. “[F]low based packets”

The court adopts Cox’s construction, “packets in one or more streams that are transmitted with a particular Quality of Service requirement.” This construction finds support in the specification, which states “[t]he term flow is used to denote a stream of one or more packets produced by a given application and transmitted with a particular [Quality of Service] requirement.” (2:6-9; 4:64-67) This construction also allows “a

received packet [to be] associated with a first or second class of service. . . . where the association of a packet with a given class is not determinable from, say, the interface on which the packet arrives.” (3:56-61)

b. “[P]acket buffer”

The court construes this limitation as “a region of memory set aside for temporarily storing data packets.” This construction finds support in the specification, which allows the first and second buffers to “be virtually rather than physically separated.” (6:11-13)

c. “[Pa]cket buffer size”

The court adopts Cox’s construction, “the number of packets that the packet buffer can store.” The specification supports this construction, explaining that the packet buffers have a “predetermined size” and are “dimensioned so as to accommodate a certain number of flows.” (5:31-36) This construction also allows for the concept of “unused buffer space.” (12:55-60)

d. “[C]ontrolling the first packet buffer size”

The court adopts Cox’s construction, “[a]djusting the number of packets that the packet buffer for the first class of service can store.” The specification teaches that “the host can “discard packets, increase the buffer size at the expense of increased delay, reduce the packet size at the expense of reduced bandwidth efficiency (more headers per unit time) or it will be able to request a higher peak-rate from the network.” (19:1-17)

2. Infringement

“[I]n many instances, an industry standard does not provide the level of specificity required to establish that practicing that standard would always result in infringement.” *Fujitsu Ltd. v. Netgear Inc.*, 620 F.3d 1321, 1329 (Fed. Cir. 2010). However, if an accused product operates in accordance with a standard, then comparing the claims to that standard is the same as comparing the claims to the accused product.” *Id.* at 1327. The patent owner must show that “a patent covers every possible implementation of a standard [to] be enough to prove infringement by showing standard compliance.” *Id.* at 1328. For BT to rely on the DOCSIS standard to show that Cox’s Motorola and Cisco EMTAs infringe requires that BT offer evidence that the EMTAs comply with every possible option and implementation of the standard.

Relying on general deposition testimony, BT concludes “that all Cox EMTAs (including Motorola and Cisco EMTAs) have been certified by CableLabs as complying with DOCSIS 2.0.”^{12, 13} (D.I. 390 at 16-17; D.I. 394, ex. 3 at 85:14-86:24; 105:14-107:7) Relying on Arris and Intel documentation, BT’s expert opined that the Intel Puma chips have separate packet buffers. (D.I. 313, ex. 4 at ¶¶ 262, 264-74; 292-96) Cox’s expert testified that in an EMTA, he could not think of a way of implementing a queue without a packet buffer. (D.I. 395, ex. 6 at 270:16-270:23) Further, Dr. Lyon’s report explained the relationships between upstream service flows, Service Identifiers (SIDs), and

¹²However, the deposition testimony is not sufficient. “And you mentioned that currently Cox has deployed DOCSIS 2.0 throughout the network? Well, EMTA’s.”

¹³Cox alleges that BT seeks to expand the scope of the accused devices to include previously unaccused Motorola and Cisco EMTAs using this theory. The court limits BT to disclosed devices and will address this issue at the pre-trial conference as needed.

upstream service queues for any DOCSIS compliant EMTAs (regardless of manufacturer). (D.I. 390 at 19; D.I. 394, ex. 1 at ¶¶ 253-261) BT has provided some evidence that Motorola and Cisco EMTAs meet the claim limitations of claim 13 and 18, requiring two packet buffers, through compliance with the DOCSIS standard and expert opinion evidence.

The court adopted Cox's construction of "flow based packets" in claim 13, as being "transmitted with a particular [Quality of Service] requirement." Cox argues¹⁴ that the "telephone traffic" and "Internet data traffic" are not designated with any Quality of Service requirement before receipt by the cable modem portion of Cox's EMTAs. (D.I. 346 at 23) However, BT points to Mr. Finkelstein's deposition testimony¹⁵ to allege that "each packet received by the [cable modem] component of the EMTA includes at least a source and destination address that Cox uses to map each packet to an upstream DOCSIS service flow." (D.I. 390 at 21; D.I. 394, ex. 3 at 107:22-110:17)

BT contends Cox's EMTAs meet the limitation in claim 13, "said first packet buffer being allocated a predetermined portion of a predetermined output bandwidth," by determining a customer's bandwidth using a series of parameters, including peak speed. (D.I. 394, ex. 3 at 150:16-152:7; D.I. 313, ex. 4 at ¶¶ 286-78) Cox's expert explained that the EMTA's output bandwidth is "unpredictable, constantly changing , and never guaranteed to be available." (D.I. 348, ex. 2 at ¶ 325)

The court adopted Cox's construction of "controlling the first packet buffer size,"

¹⁴ Supported only by a stricken declaration.

¹⁵ And Dr. Lyon's stricken declaration.

which is “[a]djusting the number of packets that the packet buffer for the first class of service can store.” Cox’s expert explained that the Queue Size Parameter “does not change . . . during the operation of an EMTA,” but is set before initialization, rendering this claim element redundant. (D.I. 348, ex. 2 at ¶¶ 394-96) BT’s expert disagreed, citing to the DOCSIS specification to opine that “Cox practices both static setting of buffer depth (at the [multimedia terminal adapter]) and active management (at the [cable modem]) to prevent overflow situations (using QI flag).” (D.I. 394, ex. 2 at ¶¶ 83-84)

BT has presented sufficient evidence to create genuine issues of material fact as to whether Cox’s accused products satisfy the claim limitations of asserted independent claims 13 and 18. Cox’s motion for summary judgment of infringement is denied.

3. Invalidity

BT moves for summary judgment that the prior art cited by Cox’s expert does not anticipate the asserted claims.¹⁶ In support of its argument, BT does not cite to expert reports or evidence, but instead presents conclusory attorney argument to disagree with the opinions of Cox’s expert, Mr. Wrocklawski.¹⁷ For example, BT argues:¹⁸

¹⁶Cox and Comcast did not move for summary judgment of invalidity for this patent.

¹⁷BT cites to the prior art, the ‘989 patent and, for some claim limitations, to Mr. Wrocklawski’s expert report.

¹⁸Mr. Wrocklawski opined that RFC 1633 discloses the “controlling the first packet buffer size” limitation, explaining that RFC 1633 “makes clear that the buffers in a router implementing the IntServ service model have a finite size and that packets must be discarded when that size limitaiton is reached.” (D.I. 382 at 24-25; D.I. 386, ex. A33 at ¶ 133) Further, Mr. Wrocklawski identified and explained his disagreement with Dr. Lyon’s arguments on the validity of the ‘989 patent. (D.I. 386, ex. A33 at ¶¶ 132-34)

Dropping packets does not amount to “controlling the first packet buffer size.” But even assuming dropping packets could amount to “controlling” the buffer size, nothing in the cited passage from RFC 1633 describes either (i) the location of the buffer, i.e., in the egress path to the network (as required by the claims) versus in the ingress path from the network, or (ii) the contents of the buffer, i.e., first class packets (as required by the claims) versus some other class of packets.

(D.I. 354 at 34) BT also describes as conclusory Mr. Wroclawski’s deposition testimony that “different forms of control would be carried out by different elements in this system,” given in response to whether prior art, RFC 1633, discloses “controlling the first packet buffer.” (D.I. 359, ex. 19 at 254:14-261:14) BT’s arguments do not suffice to meet its burden of persuasion as the movant, therefore, BT’s motion for validity is denied.

C. The ‘350 Patent

The ‘350 patent, “Communication Network With Bandwidth Managers for Allocating Bandwidth to Different Types of Traffic,” issued June 11, 1996. (D.I. 66, ex. B) At the time of the ‘350 patent, each type of traffic - voice, computer generated and video - required dedicated communication lines connecting the user’s equipment to the traffic-specific switching devices. (1:25-27) The ‘350 patent is directed to a method of transporting different types of traffic across a single communications link before they are separated again into constituent traffic types for application to distinct switching networks. To do this, the ‘350 patent describes multiplexing different types of traffic at the user’s end of the link, employing an “access bandwidth manager” (“ABM”) device to control which type of traffic is given access to the bandwidth resources of the communications link. (See, e.g., fig 4; 5:26-31; 6:37-40). At the other end of the

communications link, a complementary ABM de-multiplexes the signal back into its constituent traffic types, and then applies each of those traffic types to the appropriate switching device. (See, e.g., fig 4; 5:31-35; 6:40-43). Independent claim 10 recites:

A method of communicating over a network, the method comprising steps of:

switching a first type of traffic via a first switching means;

switching a second type of traffic via a second switching means;

connecting a user's site to the network via a communications link;

multiplexing traffic of the first and second types for transmission over the link at the user's end of the link;

de-multiplexing the first and second traffic types for application to respective switching means at the switching end of the link, and

allocating bandwidth to particular types of traffic in response to customer demand.

1. Claim Limitations

a. “[S]witching means”

A claim limitation that “contains the word ‘means’ and recites a function is presumed to be drafted in means-plus-function format under 35 U.S.C. § 112, ¶ 6.” *Net Money/IN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1366 (Fed. Cir. 2008). This presumption can be rebutted if the claim limitation itself recites sufficient structure to perform the claimed function in its entirety. *TI Grp. Auto. Sys. (N. Am.), Inc. v. VDO N. Am., L.L.C.*, 375 F.3d 1126, 1135 (Fed. Cir. 2004) (holding that the term “pumping means” in a patent directed to fuel pump assembly technology was not a means-plus-function limitation as the limitation recited not only a pumping means, but its structure, location, and operation). In the case at bar, the asserted claim

contemplates “switching means” used for switching two different types of traffic. Specifically, the claim requires “switching a first type of traffic via a first switching means” and “switching a second type of traffic via a second switching means.” By reciting “switching means,” the claim limitation does not provide sufficient structure to perform the function “switching a [first or second] type of traffic.”

The specification describes existing equipment using “specialized switching devices . . . for each type of traffic,” i.e., “voice, video and computer data.” (1:28-35) The specification discusses a “system . . . configured from standard switching elements.” (7:33-34) More specifically, “voice networks use standard 64 kbit/s voice switching networks.” (7:34-35; 9:2-4) The specification also refers to “standard switching elements,” “digital switches,” and “remote concentrators;” each term is used and described in the context of switching voice traffic. (7:29-31; 11:15-16, 12:1-5) The specification does not provide an example or description of a switching device for other types of traffic. Without an example or description of a non-voice traffic switching device, the specification does not provide sufficient structure of the means-plus-function claim limitation, which requires two switching means.¹⁹

2. Infringement

¹⁹BT’s citation to the definition of “switching” provides further evidence that different types of switching are present in the art. See *IEEE Std. Dictionary of Electrical and Electronics Terms*, at 1070 (6th Ed. 1996) (defining switching as “[i]n networking, pertaining to a connection that is established by closing switches. See also: circuit switching, digital switching, message switching, packet switching.”)

As the court finds the “switching means” claim limitation indefinite, Cox’s motion for summary judgment of non-infringement of the asserted claims is granted.²⁰

3. Invalidity

As discussed above, the limitation “switching means” in independent claim 10 is indefinite, therefore, Cox’s motion for summary judgment of invalidity is granted.^{21, 22}

D. The ‘532 Patent

The ‘532 patent, “Communication System,” issued August 25, 1992. (D.I. 66, ex. A) At the time of the invention, communications systems used passive optical systems with one wavelength for telephony and another wavelength for broadcast television. (Abstract; 1:15-22) Such systems did not allow for “broadband services in both directions for viewphone or high speed data handling.” (2:46-50) The proposed invention used “bidirectional asynchronous time division [“ATD”] information on another wavelength,” which allowed information packets to flow upstream and downstream on a common wavelength. A head end allocates time slots to information packets to ensure that they do not collide. (4:5-15) This control allows each station to receive transmissions according to their network minimum bandwidth requirements, while

²⁰As the court finds the claim limitation indefinite, the court cannot complete a meaningful infringement analysis. See *Markman*, 52 F.3d at 976. Additionally, the claims are invalid and, therefore, not infringed. *Exergen Corp. v. Wal-Mart Stores, Inc.*, 575 F.3d 1312, 1320 (Fed. Cir. 2009) (“invalid claim[s] cannot give rise to liability for infringement”) (citation omitted); *Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1546, 1553 (Fed. Cir. 1989) (if an independent claim is not infringed, any claim depending thereon is not infringed).

²¹Dependent claims 11, 13 and 14 are also indefinite as each add limitations which do not clarify the “switching means limitation.”

²²The court does not reach Cox’s argument that the claims are anticipated.

allowing other stations to take advantage of unused capacity. (9:60-10:13; 3:25-38)

Independent claim 30 recites:

A method of controlling a bidirectional broadband and telephone network from an end of the network including allocating at the end of the network time slots for information packets to travel without interference to and from a plurality of receiving stations, the allocation including determining round-trip delay between the end of the network and each of the receiving stations; adjusting the round-trip delay to ensure correct spacing of the information packets during passage through the network; interrogating stations and enforcing allocation thereto to ensure each station's minimum bandwidth requirements is [sic] fulfilled; and, dynamically allocating spare capacity to each station for bursty services.

(13:22-36)

1. Claim Limitations

a. “[A] bidirectional broadband and telephone network”

The specification describes a network with three wavelengths, one for each of telephony, broadcast television, and ATD information. (‘532 Figs. 3-4, 1:57-60) A single wavelength is disclosed “for the two directions of transmission” (2:59-64) and figure 3 depicts:

ATD channels[, which] are handled by ATD block using wavelength 3 and for both outgoing and incoming information which will pass via the local exchange end This wavelength carries two channels, one for the downstream directions to the customers and one for the upstream direction from the customers end to the exchange.

(3:13-20) Each of the two embodiments of the invention use an “ATD channel . . with its own specific wavelength for the upstream and downstream direction.” (3:55-59)

Claim 30 describes “allocating . . . time slots for information packets **to travel without**

interference to and from a plurality of receiving stations,” indicating that the claimed method is directed to the embodiments using an ATD channel. The court adopts Cox’s construction, “[a] network using the same wavelength for both incoming and outgoing broadband and telephony data.”

b. “[F]or information packets to travel without interference to and from a plurality of receiving stations”

Similarly to the previous limitation, the court construes the limitation, “[i]n a manner that enables multiple stations to transmit and receive packets over the same wavelength without interference from another packet.” The specification does not define “interference,” however, the term is used in the context of packet transmission and time slots.²³ (Abstract; 1:34-37)

c. “[R]ound-trip delay”

The court adopts Cox’s construction for this limitation, “[t]he time elapsed between the local exchange end transmitting a ranging control cell to a receiving station and the local exchange end receiving the ranging control cell back from the station.” The specification refers to measuring the round-trip delay by “sending specially recognized ‘ranging’ cells” (6:53-65)

d. “[A]djusting the round-trip delay to ensure correct spacing of the information packets during passage through the network”

²³ “[i]f simultaneous transmissions of more than two signals are made, a mutual interference occurs In case of packet transmission, this interference results in a packet collision.” (D.I. 305, ex. 29, Mutsuura, Kouichi, et al., *A New Control Scheme with Capture Effect for Random Access Packet Communications*, IEEE, at 0939 (1989))

The court construes the limitation as, “[v]arying the size of the elastic buffer that delays transmission so that packet transmissions are properly synchronized.” This construction finds support in the specification, which describes the round-trip delay mode as “required so that the local exchange end can adjust the delay in the round-trip path to ensure that upstream cells from different customers are correctly interleaved.” (6:62-65) The patent describes using an “elastic buffer” to “ensure[] correct adjustment of the round[-]trip delay.” (4:9-25; 5:11-30)

e. “[E]nforcing allocation thereto to ensure each station’s minimum bandwidth requirements is [sic] fulfilled”

The court adopts Cox’s construction, “preventing interrogated stations from transmitting more than their respective allocated bandwidths so that every station is provided its guaranteed access rate.” Both of the patent’s embodiments poll all stations to obtain ‘d’ values, which identify the number of packets to be transmitted. (7:35-44; 9:36-44) The specification refers to “guaranteed” access for each customer. (7:52-57; 9:10-12)

f. “[W]herein the requesting step includes ... generating a further request if an error is detected”

The specification identifies “label error detection/correction” (6:34) and “single bit error[s]” (8:68) The customer’s access equipment checks to see that the information sent was correctly received (8:32-33), and ATD headers contain a “limited error correction field” (8:67). The claim requires that the method generate another request for bandwidth allocation if an error is detected. The additional request does not change

based on the type of error. Contrary to Cox's suggestion, the court concludes that the claim is not indefinite and does not need construction. The plain and ordinary meaning shall apply.

2. Infringement

The asserted claim 30 requires "interrogating stations and enforcing allocation thereto to ensure each station's minimum bandwidth requirements is [sic] fulfilled." Cox's expert defines interrogating stations as "[t]he process whereby a signal or combination of signals is intended to trigger a response" or "[t]he process whereby a station or device requests another station or device to identify itself or to give its status." (D.I. 348, ex. 2 at ¶ 104) BT's expert opines that "the MAP message sent regularly from the CMTS giving each and every station the opportunity and ability to request transmission bandwidth when some is required qualifies as a process whereby a signal (the MAP message) is intended to trigger a response (the upstream request from the station(s) that require bandwidth)." (D.I. 394, ex. 2 at ¶ 21) Cox's expert disagrees, as "the CMTS does not wait for a response from the EMTA; further, the contents of MAP messages themselves do not constitute an interrogation and are merely permissive." (D.I. 348, ex. 2 at ¶ 110) The court concludes that there exists a genuine issue of material fact as to whether the accused products meet the "interrogating" limitation.

Cox also argues that several other claim limitations²⁴ are not met by its accused

²⁴"[A]llocating at the end of the network time slots for information packets to travel without interference to and from a plurality of receiving stations" (D.I. 346 at 27-28); "enforcing allocation thereto to ensure each station's minimum bandwidth requirements is fulfilled" (*id.* at 30); "a bidirectional broadband and telephone network" (*id.* at 31); "round-trip delay" (*id.* at 32); "adjusting the round-trip delay to ensure correct spacing of the information packets during passage through the network" (*id.* at 32-33).

products. To support its position, Cox relies on the stricken declaration of Mr. Finkelstein (and attorney argument) to disagree with the opinions offered by BT's expert. The court has insufficient evidence to properly evaluate the arguments, therefore, Cox has not met its burden of persuasion for these limitations. Cox's motion for summary judgment of non-infringement is denied.²⁵

3. Invalidity

BT moves for summary judgment that claim 39 is not indefinite. Claim 39 recites:

A method as claimed in claim 38 including requesting from any station a change in transmission access and responding from the end of the network to the request to change allocation or to maintain or decrease allocation and generating information to the requesting station indicative of any change.

(14:11-16) The specification (and figures) describes a system using controllers as follows: "The first device is the allocation control (Control 56 and block 52 of FIG. 5) which is responsible for sending all 'change allocation' messages to the controller at the local exchange" (7:52-55) The polling and allocation depends in part on "the allocation allowance provided from the 'd' counters within block 56." (4:43-46) "Controller 66 has the stored 'd' value applicable to the amount of access available and extracts information from the headers of packets received from the customers via blocks 73 and 63 to determine the latest 'd' allocation requirements." (5:35-49) "To ensure that any repeat-type 'change allocation' messages are correctly responded to,

²⁵As the court did not adopt Cox's construction for the limitation, "for information packets to travel without interference to and from a plurality of receiving stations," Cox's argument for non-infringement with respect to this limitation is moot.

the local exchange controller (block 66) maintains 3 registers 78 for each customer.” (8:38-41) Further, “[t]he controller 66 at the local exchange may receive requests from block 56 to increase a customer’s ‘d’ value via the ‘change allocation’ setting.” (9:64-66) From this description, claim 39 contemplates requesting changes in transmissions and responding to requests to change allocations. The court concludes that this claim is not indefinite.²⁶

BT also moves for summary judgment that the prior art cited by Cox’s expert does not anticipate the asserted claims.²⁷ In support of its argument, BT cites to Cox’s expert report and presents conclusory attorney argument to disagree with the opinions disclosed therein. For each of the two prior art references, BT argues:

Regardless of whether the cited passages disclose the claim limitations as Mr. Bates contends (which BT does not contest only for the purpose of this motion), [the prior art] cannot anticipate claim 30 as a matter of law because [defendants] cannot establish by clear and convincing evidence that the elements that Mr. Bates cites in the [prior art] are arranged or combined in the same way as recited in claim 30 of the . . . ‘532 patent.

(D.I. 354 at 40, 42) BT alleges that Cox’s expert acknowledged that the Sirizi reference taught away from using “adaptive polling,” by referencing a single question and answer from Mr. Bates testimony.²⁸ BT’s arguments do not suffice to meet its burden of

²⁶The parties have not identified a particular limitation of claim 39 for the court to construe. If the parties disagree on the application of the plain and ordinary meaning, proposed claim constructions should be submitted to the court before trial.

²⁷Cox and Comcast did not move for summary judgment of invalidity for this patent.

²⁸ Q Well, I just want to be clear. Sirazi doesn’t use any polling techniques in his new adaptive demand media access

persuasion as the movant, therefore, BT's motion for validity is granted in part and denied in part.

E. The '247 Patent

The '247 patent, "Fault Monitoring," issued July 3, 1999. (D.I. 66, ex. F) The '247 patent claims a method and apparatus for "monitoring a telecommunications system for occurrences of conditions causing unavailability of a system to a user" and "generating an alarm in response to such conditions." (9:26-34; 10:28-37) The claimed method monitors whether the number of such "conditions causing unavailability" reaches or exceeds a threshold and then turns on an alarm indicator. (Fig. 1; 5:11-14; 5:14-15) Independent claim 1 recites:

A method of monitoring a telecommunications system for occurrences [sic] of conditions causing unavailability of a system to a user, and generating alarms in response to such conditions; said method comprising the steps of monitoring the system for the occurrence of one or more such conditions; and activating an alarm indicator if the number of occurrences of such conditions counted during a predetermined time interval is equal to or greater than a threshold value.

(9:26-35)

1. Claim Limitations

a. "[C]onditions causing unavailability of a system"

protocol, does he?

A Not as a -- in his improvement, his intent was not to use it.
Correct.

(33:19-33:23) (this portion of the transcript was not provided to the court)

This specification references distinguishing and counting “occurrences of the fault condition.” (4:10-11; 4:31) “Fault” is referenced throughout the specification and the use of a “fault monitor” is disclosed. (See e.g., 2:48-56; 3:1-11; 6:1) As requested by BT, plain and ordinary meaning of this limitation shall apply.

2. Infringement

Cox relies on two fact witnesses²⁹ and attorney argument to dispute BT’s expert report and conclude that SIP error messages are not an infringing use, as these messages do not meet the claim limitation “conditions causing unavailability of a system.” (D.I. 346 at 36-37; D.I. 348, exs. 17, 18) For example, Cox argues that the messages 401 and 403 indicate that an incorrect password was entered or unauthorized access was detected, which is not a service interruption. (D.I. 348, ex. 17 at ¶¶ 8-9) BT disputes this conclusion and replies based on the same witness testimony (and its stricken declaration) that these messages do result in Cox’s system being unavailable to a user. The court concludes that there is a genuine issue of material fact as to whether the accused devices practice the asserted claim. Cox’s motion for summary judgment of non-infringement is denied.^{30, 31}

²⁹The declaration of Mr. McLeod, the Executive Director of Strategic Service Delivery Architecture, and the deposition of Ms. Zile (position unknown).

³⁰Cox’s argument that the accused devices do not meet the limitation “conditions causing unavailability of a system” are moot as they are based on Cox’s construction, which the court did not adopt. Cox presents a five-line argument under BT’s construction (which is closer to the plain and ordinary meaning), which is insufficient to meet Cox’s burden of persuasion.

³¹BT does not oppose Cox’s motion of partial summary judgment that Cox’s Empirix system does not infringe the ‘247 patent if Cox indeed discontinued its use after December 2011. Therefore, the court grants the motion for partial summary judgment.

3. Invalidity

The parties' experts dispute whether the prior art, G.784, discloses the unavailability of the system to a user as required by the claim language. Cox's expert opines that G.784 describes certain conditions, which cause service interruptions. The availability of the system to the user is directly impacted should those failures occur "on a 'critical path' with 'no alternate paths" (D.I. 322, ex. A14 at ¶ 58; ex. A17 at 187:12-189:6) However, BT's expert disagrees and opines that the illustration used by Cox's expert does not disclose the full system, and that "there's no discussion of what the system is, and there's no discussion here about if these are the only links, if there are alternate links. It -- It really just doesn't talk about any of those details." (D.I. 358, ex. 8 at 358:17-21; 359:7-18) With this dispute, there are genuine issues of material fact as to whether the prior art, G.784, anticipates the '247 patent.

BT argues that the additional six references "fail to distinguish between faults that cause unavailability to the user and those that do not." (D.I. 354 at 23) To support its conclusion, BT relies on attorney argument and two references to Cox's expert report. BT has presented no expert opinion or evidence to meet its burden of persuasion. The competing motions for summary judgment of validity are denied.

V. EXCLUDING EXPERT TESTIMONY

Cox moves to exclude certain testimony of BT's experts on infringement.³² Rule 702 of the Federal Rules of Civil Procedure allows a qualified witness to testify in the form of an opinion if the witness' "scientific, technical, or other specialized knowledge

³²As the court has found the '742 patent not infringed and the '350 patent invalid, Cox's motion to exclude testimony as to these patents is moot.

will help the trier of fact to understand the evidence or to determine a fact in issue” and if his/her testimony is the product of reliable principles and methods which have been reliably applied to the facts of the case. Fed. R. Civ. P. Rule 702. Cox argues that the majority of the direct infringement opinions presented by BT’s experts are conclusory and do not provide sufficient explanation to support the conclusion that the accused claim limitations are met. However, each of the experts offered reports wherein their opinions were supported by evidence. That Cox’s experts reached different conclusions on the same evidence does not render the testimony of BT’s experts inadmissible. Instead, Cox’s concerns go to the weight of the experts’ testimony and may properly be addressed on cross-examination.

Cox also argues that BT’s expert failed to articulate let alone support any theory of infringement under the doctrine of equivalents for the ‘532 and ‘989 patents. For each of the disputed limitations, Dr. Lyon contends that “Cox literally or equivalently performs” the limitation and presents his opinions on literal infringement. (See *e.g.*, D.I. 313, ex. 4 at ¶¶ 79, 124, 213) Following the literal infringement analysis, Dr. Lyon concludes that, even under Cox’s construction, the limitation would present “insubstantial differences” and would “perform the same function in substantially the same way to achieve substantially the same result.” (See *e.g.*, *id.* at ¶¶ 95, 134, 224) Dr. Lyon did not present “particularized testimony and linking argument as to the ‘insubstantiality of the differences’ between the claimed invention and the accused device or process, or with respect to the ‘function, way, result’ test” *American Calcar, Inc. v. American Honda Motor Co., Inc.*, 651 F.3d 1318, 1338-39 (Fed. Cir. 2011) (internal citations and quotations omitted). Although Dr. Lyon presented

conclusions for each limitation, he did not articulate how the accused devices would equivalently perform each limitation. Because Dr. Lyon's report does not provide a basis for his equivalency conclusions, his conclusions are not sufficient to pass muster under the standard, and any testimony on the doctrine of equivalence is excluded. See *Texas Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1566-67 (Fed. Cir. 1996) ("[W]ithout these requirements, the fact-finder has no analytical framework for making its decision and is put to sea without guiding charts when called upon to determine infringement under the doctrine of equivalents") (internal quotation and citation omitted). Cox's motion to exclude is granted in part and denied in part.³³

VI. CONCLUSION

For the foregoing reasons, BT's motion to exclude the declaration of Jeffrey Finkelstein (D.I. 379) and Cox's motion to strike portions of the declarations of Dr. Almeroth, Dr. Lyon, and Mr. Griffin (D.I. 402) are granted. Cox's motion for summary judgment of non-infringement of all asserted claims is granted in part and denied in part. (D.I. 345) Cox's motion for summary judgment of invalidity of the '350 and '247 patents is granted in part and denied in part. (D.I. 320) BT's cross-motion for summary judgment of validity is denied. (D.I. 351) BT's motion to exclude the testimony of Regis Bates is denied as moot. (D.I. 310) Cox's motion to exclude the testimony of BT's infringement experts is granted in part and denied in part. (D.I. 311)

³³Cox also moves to exclude the testimony of Mr. Bates as to the enablement of the '350 patent. (D.I. 310) As the court found the asserted claims of the '350 patent indefinite, the motion to exclude is moot.